

Model company

Swiss bikes



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1. Introduction

1.1 Company history

15 years ago, the technical merchant Richard Stark took over his parents' bicycle specialist shop in Bern. At the beginning, he launched some expensive import/trend brands like Cannondale and Scott. Richard was looking for another solution, because he only reached a low price/performance ratio due to the intermediary trade and the importation costs. But the domestic market regarding innovations was poor. Though it was possible to obtain good Swiss quality, there existed no creative design and innovation. A few years later, his flair for technical refinement and pleasing functional design made him construct his first bicycle.

Soon afterwards he founded his company „swiss bikes“. 12 years ago, the first self-manufactured bicycle had been developed: a mountain bike, which was particularly convincing owing to its lightness and steadiness. The first sales were only carried out by his own specialist shop. New customers were gained by word of mouth. Soon, Stark participated in trade fairs in Germany and Switzerland in order to present his products and get in contact with partner companies for sales and delivery. Six years ago, his fame was established in the numbers of bicycle-sport interested people through the foundation of the bicycle team and the execution of his own racing match in Adelboden. The success of the first years was the reason for Stark's decision to expand nine years ago. He developed the factory “swiss bikes Productions” and the logistic centre “swiss bikes Distributions”. The range was constantly increased. Meanwhile it is possible to buy racing bikes, mountain bikes, city bikes and trekking bikes as well as accessories with the logo of “swiss bikes”. Today, the company has approx. 70 employees and it exports to more than ten countries all over the world. The specialist shop in Bern still exists.

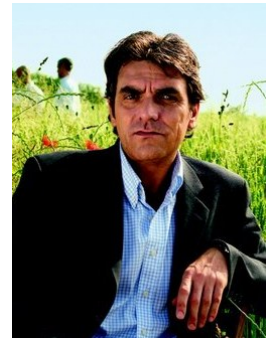


Figure 1
The visionary - the founder of the company Richard Stark, 44, knows what he wants.

1.2 Company philosophy

“swiss bikes“ wants to produce and purchase innovative bicycles, with a high quality design and which are up-to date. The products, settled in the middle or high price segment, will be produced for a young, sportive and solvent target group.

Motivated employees are the most important success factor of the company. It is important to treat them fairly and to pay them fair salaries.

The company is convinced of the production location Switzerland and their goal is a high share of added value in this country.

Another central factor of success is the customer relationship. In relation to customers an open and honest attitude is aimed at. It is important to treat them friendly and to advise them in a professional way.



Figure 2
swiss bikes Production AG and Distribution AG

1.3 Current situation

The company has continuously increased in the last years and was able to secure a firm place on the German and Swiss bike market. These two markets should stay a central supporting leg of the company. Besides an increase – the aim is to take over the market leadership in the high-end area as well as in the middle class area – and the exploitation of new markets, the company also intends to augment the distribution network with the specialized trade.

2. The bike market

The German and Swiss business markets are of central importance for “swiss bikes“. They are characterized in figures 3 and 4.

2.1 Market data of Switzerland

In Switzerland 72 % of the turnover is made by the specialized trade. The proportion of bikes “made in Switzerland” is approx. 15 %.

Turnover, sales and parts of the sale in Switzerland in the year 2015 are shown in figure 3.

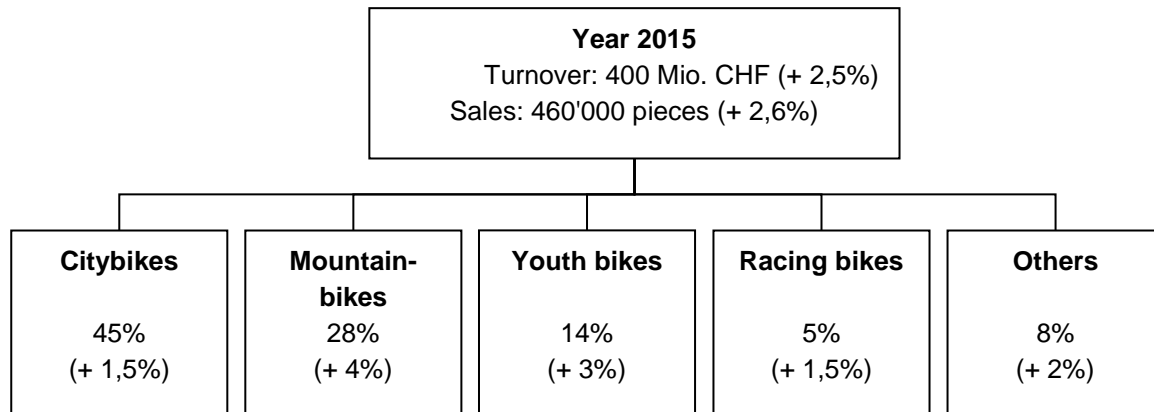


Figure 3
Turnover, sales and proportion of sales of the types of bikes in Switzerland in the year 2015

2.2 Market data of Germany

Germany has a bicycle stock of approximately 65 million pieces. 52 % of the sales are made by specialized stores. The share of the German production is also 52 %. Figure 4 shows the turnover, the sales and sales shares of bikes in Germany in the year 2015.

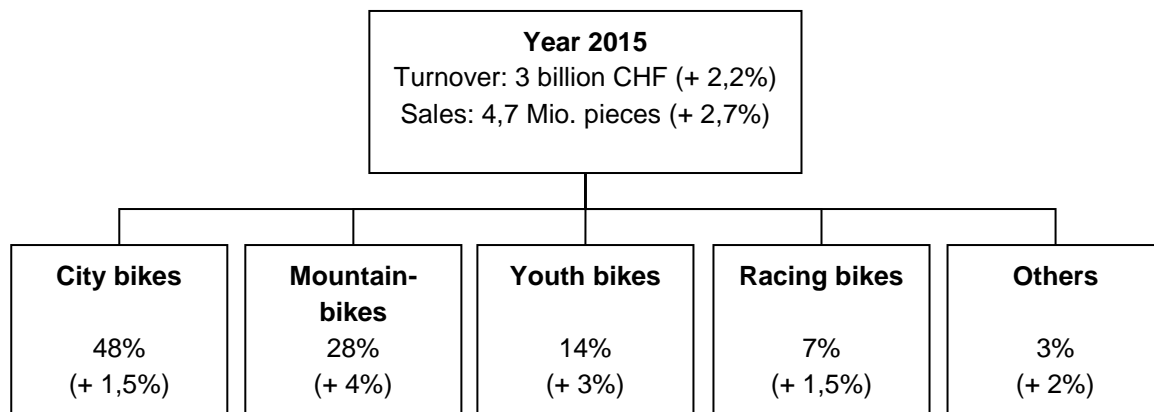


Figure 4
Turnover, sales and proportion of bikes in Germany in the year 2015

2.3 Market shares and turnover of “swiss bikes“

Last year, “swiss bikes“ sold 17’500 bikes. Approx. 70% of them have been sold in Germany or in Switzerland. In the years to follow, the company’s aim is a constant annual growth of approx. 5 %; it intends to achieve a turnover of 60 million CHF within the next 10 years. The aspired growth should take place in all markets at the same time, as shown in figure 5.

Market	Is	Target 1 year	Target in 5 years	Target in 10 years
Turnover Switzerland [piece]	6’000	6’300	7’660	9’500
Turnover Germany [piece]	7’000	7’400	9’000	11’500
Turnover rest of the EU [piece]	4’000	4’200	5’000	7’000
Turnover rest states [piece]	500	525	600	800
Total turnover [piece.]	17’500	18’425	22’260	28’800
Turnover [Mio. CHF]	36	38	45	60

Figure 5
Aspired turnover quantities of “swiss bikes“

2.4 Competition

There are currently many bike producers and brands on the market. In Germany and Switzerland more than 100 companies are offering their products. In Switzerland, the main business competitions are the companies BMC, Cresta and Thömus. The companies Storck, Ghost and Stevens are serious competitors in Germany. “Bike Alliance”, a corporate merger, possesses several brands, particularly Hawk in the middle price segment and Nox Cycles in the higher price segment. It is possible for the alliance to enforce strong volume advantages due to the collective purchase and production. The import market with the U.S brands Cannondale, Scott or Wheeler is also offering a strong competition.

2.5. The company

Today „swiss bikes“ is a holding company. It consists of a production facility, the "swiss bikes Production AG“, a distribution facility, the „swiss bikes Distribution AG“, and the "swiss bikes Racing AG", a bike team. You will find the organigram of the „swiss bike-Holding“in the annex to chapter 7.1.

2.6. Locations

The headquarter of the "swiss bikes" Holding is situated in Berne, as well as the „swiss bikes Racing AG“. The production and distribution facility is located in Egerkingen – mainly due to traffic reasons. An additional distribution facility is located in Frankfurt am Main, Germany.

2.7. Company structure

All companies (Production, Distribution and Racing) belong to the holding to at least 70 % (see figure 6). The remaining shares are distributed to several investors. The holding company also coordinates the activities of the three companies. It is responsible for an overall strategy, coordinates sales and production and provides centralized IT-services. The companies have a purely functional organization, in each department there is a head of department. A cooperative leadership was able to succeed, however, in spite of the really rigid organization structures.

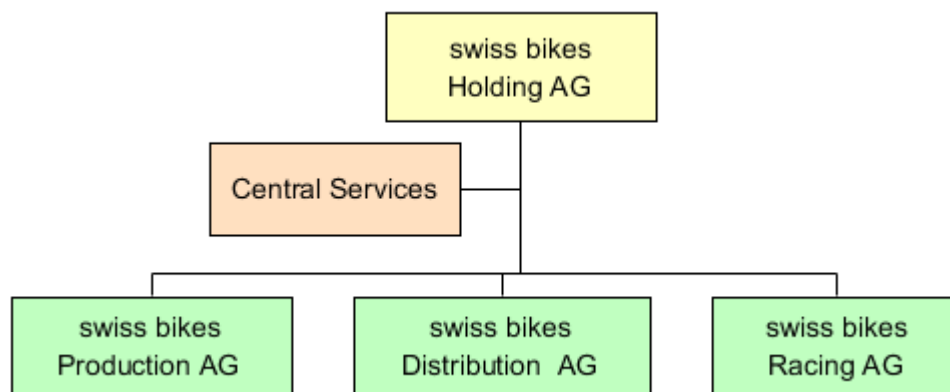


Figure 6
The company structure of "swiss bikes"

The "swiss bikes Production AG" is responsible for the technical aspects. There, new components are developed and produced. The production consists of two divisions: the factory and the series manufacturing.

- In the factory the individual bikes are produced, while in the series manufacturing the serial bikes are constructed.
- The products are completely sold by the „swiss bikes Distribution AG“, which is also in charge of the marketing and customer service.

The main function of the central services is to make IT services available, but it also executes coordination tasks in case of trans-sectored problems, e.g. in case of questions concerning order exchange between sales and production or concerning marketing activities of the distribution in connection with the Racing Team. The central service employs two technical scientists, a computer scientist, an economic computer scientist and a person who is responsible for the organisation. The leader of this team is the manager Richard Stark.

A problem is the knowledge transfer between marketing and construction. The marketing and sales department of „swiss bikes Distribution AG“ knows the market better than the development department of the „swiss bikes Production AG“. There are also frictional losses between the customer service, the production and the quality assurance.

2.8. Staff

At the moment „swiss bikes“ occupies approx. 70 people with an average age of 35 years. The majority of employees is younger than 40. Approximately 30% of the staff is female. More than 1/3 of employees possess a university degree. Because quality is very important for "swiss bikes", mostly well-educated professionals are recruited.

Only a few employees of the serial production and in the stock possess a deeper level of education. In the sales department and in the customer service you will find preferably traders with a technical apprenticeship. In order to augment the motivation and to benefit more from the ideas different solutions for employee have been tested, for example, internal idea pools and innovation contests.

2.9. Products

„swiss bikes“ possesses a wide range of high-quality bikes. The range contains road bikes, mountain bikes (fully and hard tail), city bikes and trekking bikes. Of late, "swiss bikes“ also produces fitness bikes.

„swiss bikes“ distinguishes between standard bikes and individual bikes. Additionally, various components are constructed e.g. suspension forks of carbon. In addition, various components are designed, for example, carbon forks. The constructions are manufactured by selected partners and sold by „swiss bikes Distribution“.

2.9.1. Standard range

The "swiss bikes“ product line contains bikes of all mentioned types, with different frame sizes for men and women. "Swiss bikes" offers only high quality products from the upper middle class to the top segment. Some examples from the standard range are shown below (Figure 7 and 12).



Figure 7
For speed on the tarmac – "swiss bikes" Road



Figure 8
Quality in every day life – "swiss bikes" Citybike Woman



Figure 9
New trend – "swiss bikes" fitness bike



Figure 10
Fully elastic mountainbike – "swiss bikes" Fully



Figure 11
For long distances – "swiss bikes" Trekking



Figure 12
Trailworthy – "swiss bikes" Hardtail

2.9.2. Individual bikes

In addition to the standard serials, „swiss bikes“ also provides an individual offer in 3 steps.

- The first step offers the possibility to combine individually all components and standard frames of a catalogue.
- The second step addresses ambitious sportsmen or sportswomen which are looking for an exclusive product. The frame production, however, will be executed due to standard measurement. Five body measurements can be made by the customer or by his trader and it is possible to add them to the order. The components can be chosen without limitations. If requested, it is possible to organize articles which are not presented in the catalogue.
- The highest step is the individual production for professionals, above all for members of the racing team. But the offer is also available as VIP-service for a corresponding price to other customers. For this service the customer will go directly to „swiss bikes“ in order to obtain comprehensive advice and to execute different component tests. As you can see in figure 13, the frame construction is made individually according to the detailed body measurement.



Figure 13
Customized carbon racing bike

2.10. Finance

The annual report of "swiss bikes" is shown in the following consolidated balances and income statements:

ASSETS	31.12.2014 (in 1'000 CHF)	31.12.2013 (in 1'000 CHF)
Liquid assets and securities	3'900	4'600
Customer demands	4'800	4'300
Other demands	900	500
Stock	7'700	7'600
Active invoice accruals	100	200
Total liquid assets	17'400	17'200
Fixed assets	4'300	3'900
Finance assets	500	600
Immaterial assets	400	300
Total fixed assets	5'200	4'800
Total Assets	22'600	22'000

Figure 14
Consolidated balance – assets dated 31.12.2013 and 31.12.2014

LIABILITIES	31.12.2014 (in 1'000 CHF)	31.12.2013 (in 1'000 CHF)
Liabilities of the provider	3'100	2'200
Other short-term liabilities	1'000	900
Short-term financial liabilities	2'500	4'200
Passive accruals	400	250
Total short-term debt	7'000	7'550
Long-term financial liabilities	2'200	2'300
Latent income tax	200	150
Reserves	1'200	1'000
Total long-term debt	3'600	3'450
Capital stock	4'000	4'000
Capital reserves	500	500
Profit reserves	6'000	5'200
Share minority shareholder on equity	1'500	1'300
Total Equity	12'000	11'000
Total Liabilities	22'600	22'000

Figure 15
Consolidated balance – liabilities to 31.12.2013 and 31.12.2014

EARNING	2014 (in 1'000 CHF)	2013 (in 1'000 CHF)
Net sales	36'000	33'800
Other sales	1'500	1'400
Total Sales	37'500	35'200
EXPENSE		
Material expenses	21'600	20'500
Staff expenses	4'900	4'600
Rest business expenses	8'000	7'280
Amortizations	460	450
Total Expenses	34'960	32'830

Company earnings (EBIT)	2'540	2'370
Net Financial results	-270	-240
Earnings before tax	2'270	2'130
Tax	-570	-530
Profit	1'700	1'600
Share of minority shareholder at the profit	540	480
Share swiss bikes shareholder at the profit	1'160	1'180

Figure 16
Consolidated profit and loss account for 2013 and 2014

2.11. Media presence

The website was realized internally and lies physically on the servers of the Internet provider green.it. It consists of a homepage, which contains the central image and two navigation areas. On the left side there is a search option, a registration for the newsletter and a branching to a download area, to pictures and news areas.

The real navigation is located in the header.

- The interested person will find under „bikes“ a presentation of the current range of deliverable serial bikes. The following pages are subdivided into the product categories hard tail, fully, trekking, fitness, city and road.
- You will find positive votes of the press under "testing resources". This area mostly consists of downloadable test reports, which are deposited as PDF files.
- The area „technology“ is very detailed. The interested person follows a classification into „frame“, „fork“, „damper“ and a support for finding out the correct frame size corresponding to the body size and the type of the bike.
- "Racing" leads to pages which are supported by the "Swiss racing bikes AG". Here, the racing team would have the possibility to present itself and tell about its successes with "swiss bikes". But this task is hardly realizable, particularly the topicality can rarely be guaranteed.
- Under the heading "distribution", it is possible for the interested person to find a retailer who is located close to him. „Contact“ is showing the addresses and maps of the "swiss bikes Productions AG", of the "swiss bikes Distributions AG" as well as the imprint.

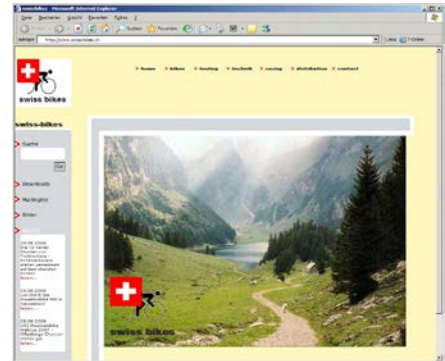


Figure 17
Homepage of the internet appearance

In addition to the website, the regular appearance in journals is very important for "swiss bikes". Mainly new developments or further developments and good results of the racing teams have the interest of the journals.

2.12. IT-Infrastructure

"Swiss bikes" primarily uses standard software of manufacturers. A partial exception is made by the department of Research and Development. "swiss bikes" emphasises innovation and technological advantage. For this reason, the R&D department possesses a comprehensive infrastructure and a possibility to develop its own software. The computer equipment of the development department is composed of five efficient Linux and Windows desktop PCs and three Linux server on each of which run the CAD respectively FE software (see Section 4.1) with every two Floating Licenses. On another server, the database (mySQL) is located in order to store and advertise data, from which a daily incremental backup on tapes is made. In the development department, there are also three printers and a DIN-A0-plotter. All computers and printers are connected by 100Mbit Ethernet. The access to the data between Linux and Windows is made via a Samba server. The software will be mainly developed in the computer language Java, in order to be platform-independent and applicable under Linux and Windows. An overview of the hardware and software as well as a visualization of the IT environment can be seen in the annex.

The biggest problem appears during the data distribution. Although there exists central data storage, it will be mainly used for general documents. Important data of the development, production and logistics supply will be kept locally, because the authorization administration is not set up optimally.

3. **swiss bikes Production AG**

“swiss bikes Production“ is developing and producing bikes. The production mainly consists of assimilation of surface treatment. The central functional areas of "swiss bikes" are the development, purchase and production. Due to the product offer, not only a quantity production is necessary but also a single respectively a workshop preparation. The Production AG is working together with the other divisions, particularly in the case of new developments and in the case of product testing. The customer feedback usually goes directly to the Distribution AG and the racing team possesses a big know-how and professional test drivers.

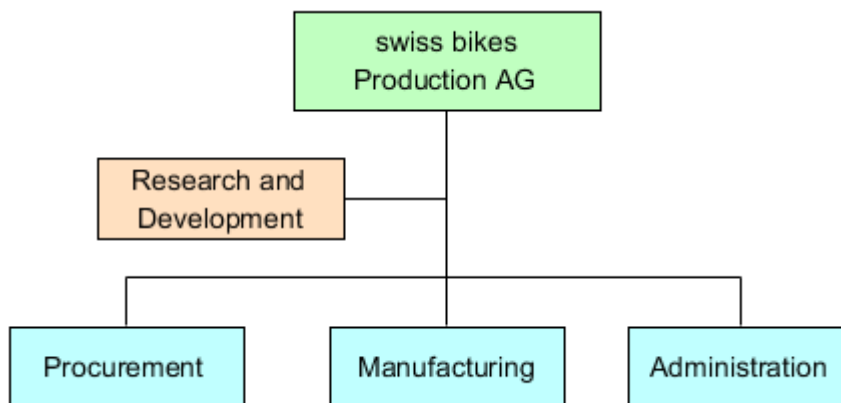


Figure 17
Organigram “swiss bikes Production AG“



Figure 18
Idea exchange and cooperation - Franz Jöri, 35, H.-P. Stalder, 40, und Sandro Hug, 29, are the R&D core

Research & Development (R&D)

The department R&D consists of five highly qualified persons. The competences include particularly computer-aided design, structural dynamics, fluid mechanics and software development.

Purchase

The purchase department has three employees: a buyer, who is responsible for good vendor relationships, contracts negotiations and orders, and two warehouse employees who are responsible for tasks such as input control, storage and supply.



Figure 19
Confident on the component market - Gisela Sutter, 32



Figure 20
The maker: Hans Meier, 33, workshop leader and Benjamin Fäh, 38, Production leader

Production

The workshop leader is supported by two mechanics. The team creates the bikes according to the individual order and advises the VIP clients. The production leader is responsible for the serial production and is leading two areas, each with an assistant for assimilation and finishing. In the assimilation eight people are employed, four professional bicycle mechanics and four non-skilled workers. The tasks are carried out in the rotation principle so that every person can carry out every activity. Four qualified employees are occupied with finishing of bike frames and other parts.

Administration

Four people are working in administration: an accounting clerk, an employee responsible for the staff and a commercial clerk as a handyman. The leader of administration is a business economist. Here exists an informal matrix organisation, because the administrator is responsible for accounting tasks as well as for staff administration tasks.



Abbildung 21
Pragmatically- Monika von
Arx, 41, Leader
administrationon

3.5. Research and Development

Customized Bikes and individually made bikes for the Racing-Team require great technical know-how. This is the reason for the Research and Development department of „swiss bikes“ which consists of five people who are able to execute the different functions of CAD-designer, structure dynamics, stream mechanics and software developer. The development department uses more and more software in order to accelerate the development of customized bikes and to improve their quality. The software used is partly commercial and partly individually developed software. The geometry of the frame and the other components are drawn by a commercial CAD programme (see Figure 24). The individual bicycle components are graphically presented on the screen. The CAD designer can modify the individual components; he can add standard components such as screws and bolts. Additionally he can assemble virtually various components in order to test the capability. A list of parts used in the CAD drawing will be created automatically and a technical drawing (building plan) can be printed. This CAD software completely replaces the original construction and the technical drawing of bikes on the drawing board. Most suppliers of bike components send the CAD data of their components in electronic data format to "swiss bikes." These data are not always fully compatible due to different CAD programs. A half automatic reworking remains necessary.



Figure 22
CAD presentation of the swiss bikes Fully

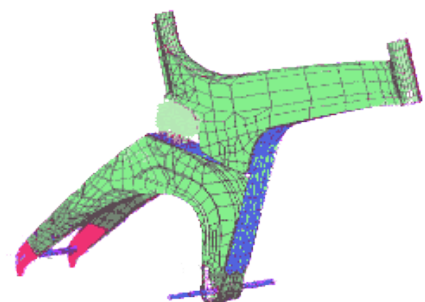


Figure 23
Finite-Elemente-Modell of a mountain-bike-
frame of a CAD-model

For the calculation of the consistency and the structure dynamic properties of the frame and other bike components, a commercial finite element program (FE program), is used. The CAD data will be read in the FE-program and the appearing loadings of the bike will be modelled by the structure dynamics, which is described as computational mechanics (CM) (see figure 25 and 26). The results of the FE-programme are graphical representations (see Figure 27), which are showing the structure dynamics, the bike components which will be loaded and if there could appear deformations or material breaks immediately or during the time. The CAD designers have the possibility to modify the geometry of the bike components or to replace the bike components by others. Since the racing team has already completed a very expensive wind tunnel tests (see figure 28), now the aerodynamics of the bikes and of their driver should be optimized with the help of a commercial CFD-program. The main target is to reduce the air resistance, which can be reached by better clothing (especially helmets) of the driver but also by changing the seat position (frame geometry) as well as by the modification of the wheels and fellyes. For this, CAD-data will be read in the CFD-program and different wind speeds as well as influences of the crosswind will be simulated. The numerical results widely correspond to the wind tunnel tests, but they are much cheaper for different test cases and it is not necessary to give them in order to an external company. Additionally to these commercial software products there are numerous self-developed programs e. g. for the first geometric interpretation of bikes from the measured size of the driver or for the conversion of data in another data format.



Figure 25
Wind channel test with racing bike
Analysis of the material clamping in the whole bike frame

The fullness of the data and the administration during the development of only one Customized Bike is a huge challenge for the company. On the one side, all data should be stored, due to legal reasons, in order to return in the case of design or manufacturing defects, e.g. broken frames. On the other side "swiss bikes" has the aim, to transfer the gained experience in the development of special individual produced bikes to the development of new bicycles in the serial production. For this, all data will be indexed accordingly and stored in a database system, as well as made available in a reporting system for a quick search. Some of the data are specially processed to create the documentation and written documents of the bike. In order to react quickly to customer demands and market changes, it is necessary for „swiss bikes“ to optimize the processes in the development of bikes, to enlarge the use of software tools and to set up an automatic production chain for a simplified replication of data. A part of this will be the internal software development.

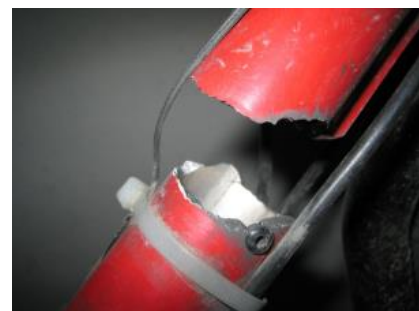


Figure 26
Extreme static load testing – till the frame break

3.6. Purchase

First the purchasing department handles the object list of the incoming orders and determines the material requirements. After that, the material will be ordered at selected suppliers.

Single parts and groups of components like damper, couplings and brackets are purchased and assembled by leading specialists. Apart from dampers, Shimano is the best provider. The frames are produced after technical specifications by selected partner companies. Carbon frames are basically produced in Germany and Switzerland, aluminium frames mainly in Asia (Taiwan).

3.6.1. Supplier relationships

The selection of suppliers is made due to strict quality criteria. The company emphasized fixed supplier relationships. "swiss bikes" delivers components also on demand components, which do not belong to the standard range, so the supplier relationships are often dynamic. But the frame manufacturers have been the same for quite some time. The relationships have been made in a lengthy process. Meanwhile, the production on exact demands of development and the delivery on time and in the required quality work smoothly to a large extent.

Orders will be made and entries will be booked due to the demands and the required dates. The required quantity of material is provided; the consumptions are booked through the materials logistic with the support of the production planning. The material warehouse is kept as small as possible. Consumables and a small stock of frequently used spare parts are stored.

Quantities of purchased parts and material are determined early by the Distribution AG. It is significant to find an optimal relationship between purchasing costs and storage costs for the different parts. In the case of individual produced bikes, there is the problem that a rapid delivery is desired, but the storage of exclusive components is unprofitable. Partially, it is possible to cope with these aspects with the help of a good relationship to the supplier.

3.6.2. Shop fabrication

It is necessary to assemble the Customized Bikes individually. This will be done by two mechanics in a garage. The necessary material will be collected by stock employees in the case of an incoming order. The external production of the frames concerning the construction requirements is the first step in the case of the individual production. The mechanics put the parts together and adjust the frame. After that the bike are transferred to the quality assurance, where the quality and functionality are checked. After the release by the quality assurance the exit documents are provided and the bike are handed over to the outgoing store.

3.6.3. Serial production

The first step of the production is the refinement of the externally produced bicycle frames. Either they will be powder coated, anodized (aluminium) or lacquered (carbon) and pigmented. The finished frames walk through the first step of the quality assurance. A laser procedure checks whether the frame is well-welded and whether the surface has no faults and cracks. After that, trademarks and descriptions are attached, in which each frame passes through a floating production. In every step a certain element is attached. The wheels are aligned and given over to quality assurance (QA). The QA checks superficially every outgoing wheel. Random tests are executed. If the quality assurance is successfully completed, the finished bikes are brought into the warehouse. The "swiss bikes Production" does not possess a finished goods store, but only an outgoing store. From there, the bikes are carried out daily to the finished goods store of the „swiss bike Distribution“.

4. swiss bikes Distribution AG

The distribution to the specialized shops is completely carried out by „swiss bikes Distribution“. Besides the central sales logistics, marketing tasks and customer service is also offered.

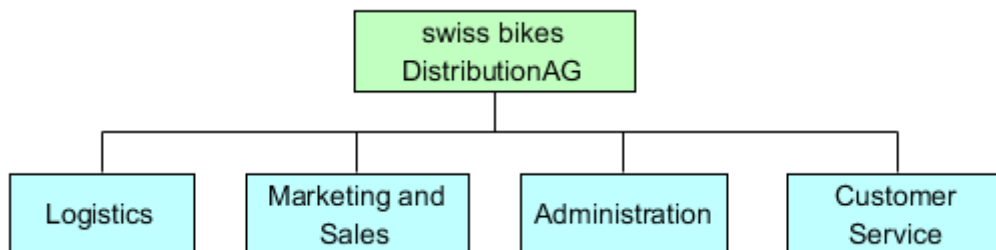


Figure 27
Organisation "swiss bikes Distribution AG"

"swiss bikes Distribution" has his head office in Egerkingen but there also exists an office in Frankfurt am Main (Deutschland). The rest of Europe is supported by the two locations – Northern Europe from Germany and the South of Europe from Switzerland. At the moment, the Asian and American markets are not actively managed. Some steps in the direction of the U.S were made, but the competition is big in this economic area. Currently, marketing concepts are being developed for the growing markets in Eastern European countries. The Netherlands are also a very interesting market for bikes; marketing analyses are also being carried out.



Figure 28
Coordinator - Jürg Breitenmoser,
39, Department manager Logistics

Logistics

The logistics department has next to the department Manager six employees, including two truckers. The other four employees are responsible for all aspects of inventory and sales coordination.

Marketing and Distribution

The sales manager is an official marketing expert. He has responsibility for two commercial experts, who are organizing the order processing and market treatment.

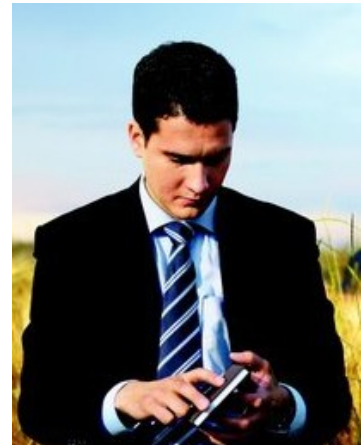
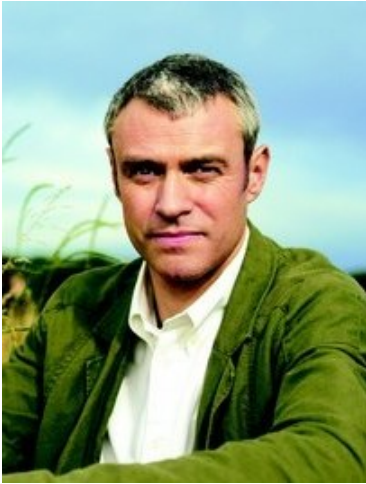


Figure 29
Market maven - Peter Nielson, 42,
Sales Manager



Administration

In the administration of the Production AG are employed a department manager, an accountant, a personnel manager and a trading clerk.

Figure 30
Data and facts - Thomas Känzig,
45, Leader Administration

Customer Service

In the customer service there work a technical sales assistant and a bike mechanic. The sales assistant deals with enquiries of and feedbacks from end customers and gives advice to specialist dealers. This partly happens in consultation with the Production AG. Additionally, she prepares customer data for development and marketing. The mechanic supports her in case of technical matters, as well as executing small repairs and checking the returns.



Figure 31
Competent and customer-friendly -
Franziska Gerber, 27, Kundendienst-

4.5. Distribution of standard series

"Swiss bikes distribution" maintains a client base and always tries to gain new customers: "mainly bicycle shops and specialized sport shops". Annually, they receive a trader catalogue with detailed specifications and prices of new models.

Owing to the participation in trade fairs and thanks to the success of the Racing Team it is not rare that „Swiss bikes distributions“ receives enquiries from new customers.

Enquiry

The customer asks for specific quantities of models, prices and possible delivery dates. "Swiss bikes distribution" collects the requests in the distribution system, checks the free stock and looks at the logistic plans in order to determine a possible or optimal delivery date. In the case of standard series, the stock is checked. If there is nothing available, it is checked if an order was already placed at „swiss bikes Production“. If yes, the production asks whether the articles will be delivered in time. If the fixed delivery date is already exceeded, the exact delivery date is asked. The customer obtains the corresponding information in the form of an offer by either mail, fax or post depending on his wish.

Order

The customer order is provided as response to an offer, or is directly provided without any further request. The order is collected directly in the order system or the offer is changed into an order. If there is a fixed delivery date, the order confirmation with delivery date, quantity and price are directly provided. Otherwise, the date is determined as described in the request and the confirmation is executed in a second step.

Delivery

The internal order papers are passed on to the logistics department. The stock provides the requested quantity in coordination with the transport plan. A bill of delivery is created and the receipt is booked. „swiss bikes Distribution“ has to guarantee a high supply readiness; therefore, a repeat-order should be placed in time at „swiss bikes Production“. Each model has fixed purchase order quantities, because the bikes are produced in certain order quantities.

Settlement

Based on the offers, orders, delivery papers and invoices are handled by the administration, and the encashment is executed.

4.6. Customized Bikes

Customizing is also carried out on the dealer network, only the "VIP customers" can directly contact "swiss bikes." The dealer firms are regularly informed about details. The most important customers are regularly visited and trained personally.

For the individual tailor-made bike a carbon frame, which is adjusted on the body mass, is produced. It is possible to determine the corresponding values at the dealer. Not only the size but also the proportions are relevant, for example, in order to identify the distance between seat and handlebar, handlebar and axle or between food pedal and seat. Only very few components can be varied for this exclusive bike, in principle it is an absolute high-end bike, for which only the very best components will be used. This order is transmitted to „swiss bikes Distribution“ by the dealer.

No fixed delivery date is promised, but only a norm delivery date is indicated. The orders are carried out with high priority, in order to fulfill the highest customer satisfaction. Delivery and settlement are made by the dealer.

Bike professionals are also directly served at "swiss bikes Production", above all the "swiss bikes' Racing Team. With them, not only the body mass is determined but also various measurements regarding ergonomics and aerodynamics are made. The second variant of customized bikes consists of free choice of components. It is possible to combine frames, the braking system, the suspension system, etc. It is exclusively a selection of components of high quality. Normally, the delivery is made by the trader network. If there is no trader in the radius of the buyer, it is possible to execute a direct shipment.

5. **swiss bikes Racing AG**

The "swiss racing bikes AG" is responsible for the team support and racing events. It executes the marketing activities of "swiss bikes distribution" and is in contact with the media. "swiss bikes Production" is supported by the racing team during the bike test and during the development of new sports equipment. „swiss bikes Production“ produces individually adapted bikes for every biker. It is possible for the racing team to gain a big part of the costs through prize moneys and event returns. The success of recent years helped the Racing AG to get strong sponsors, so that the budget of the Holding will no longer be charged.

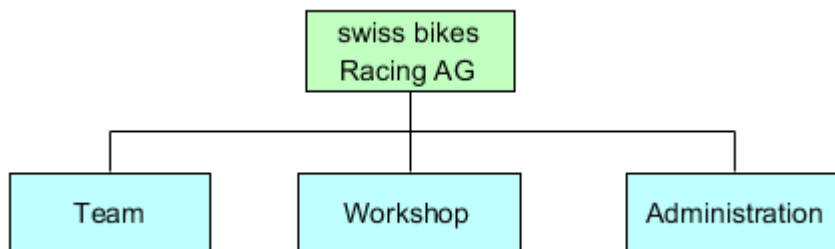
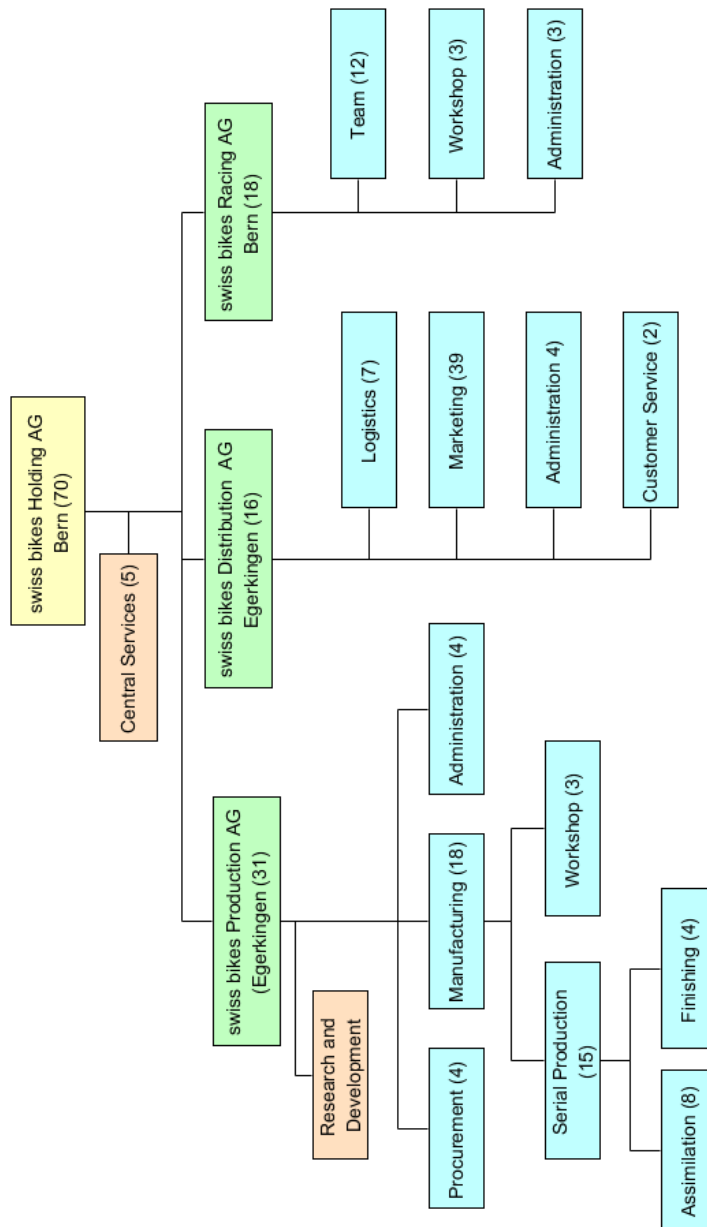


Figure 32
Organisation of the "swiss bikes Racing AG"

In the racing team, there are besides the drivers a coach and a crew consisting of one garage boss and two mechanics. Additionally, there is an organizational unit with three employees who organize and hold races and are responsible for all the other administrative tasks.

6. Annex

6.5. Organigram “swiss bikes“



6.6. Overview concerning hardware and software at “swiss bikes“

Department	Hardware	Number	OS	Standard-software	Special-Software	SB-Net Connection	Data Store (1)
Holding in Bern	PC	3	Windows 8	Office	FI / CO / Staff	yes	Z
Holding in Bern	Laptop	1	Windows 8	Office		WLAN	Z/L
Central Services	PC	4	Windows 8	Office		yes	Z
Central Services	File-/ Backup-server, Firewall, Switches	1	Windows 8	Office	Management SW	yes	Z
Research & Development	Server	3	Linux	mySQL	CAD, RD, Samba	yes	L
Research & Development	PC	5	Linux		CAD, RD, Samba	yes	Z
Research & Development	PC	5	Windows 8			yes	
Purchase	PC	3	Windows 8	Office	CRM 1	yes	Z
Production / Factory	PC	1	Windows 8	Office		yes	L
Production / Factory	PC	3	Windows 8	Office	PP-SW	yes	L
Logistics	PC	5	Windows 8	Office		yes	L
Marketing / Distribution	PC	3	Windows 8	Office	CRM 2	yes	L
Marketing / Distribution	Laptop	1	Windows 8	Office	CRM 2	WLAN	L
Administration	PC	4	Windows 8	Office	FI / CO / Personal	yes	Z
Customer Service	PC	1	Windows 8	Office	CRM 3	yes	Z
Racing	PC	6	Windows 8	Office			L
Racing	Laptop	2	Windows 8	Office			L

6.7. IT-landscape of “swiss bikes“

